

**Notice of Allowability**

Application No.

10/526,211

Examiner

Tamiko D. Bellamy

Applicant(s)

BRUCKNER ET AL.

Art Unit

2856

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/3/05.
2. ☒ The allowed claim(s) is/are 8-13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 3/3/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
**DANIEL S. LARKIN**  
**PRIMARY EXAMINER**

### DETAILED ACTION

1. Preliminary amendment dated 3/3/05 has been received and entered. Claims 1-7 have been canceled. Claims 8-13 are currently pending.

### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the means for a telemetric signal tap** (See claim 13) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### EXAMINER'S AMENDMENT

3. Authorization for this examiner's amendment was given in a telephone interview with Edward Freedman on 6/26/06.

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

- a. Claim 8, line 9, delete the word "in".
- b. Claim 8, line 10, before the word piezoresistive, change "a" to --the--.
- c. Claim 8, line 10, change the word "applied", to --fixed--.
- d. Claim 8, line 4, delete the words " particularly between 10 nm and 20  $\mu\text{m}$ ".
- e. Claim 9, line 2, insert after the word "the", --thickness of the piezoresistive amorphous--.
- f. Claim 9, lines 2-3, delete the words "between 10 nm and 500  $\mu\text{m}$ ".
- g. Claim 10, line 3, delete the words "the at least one".
- h. Claim 10, change the phrase "knock sensor with a seismic mass (3', 3) according to claim 8, wherein" to --knock sensor according to claim 8, wherein the knock sensor includes a seismic mass;--.
- i. Claim 10, line 5, change the phrase "is or can be rigidly connected", to --is rigidly connected--.
- j. Claim 13, line 2, delete the word "that".

*Allowable Subject Matter*

5. Claims 8-13 are allowed.

6. The following is an examiner's statement of reasons for allowance:

Re claim 8, the independent claim includes " a piezoresistive amorphous carbon layer is applied onto at least one face of the at least one spring washer " in combination with the remaining claim limitation is not taught and/or made obvious by the prior art. Haefnet et al., considered closest to related art, teaches Wheatstone bridge circuit formed by the piezoresistor elements (52,54, 56, and 58) from the underside a beam member (44). Haefnet et al. does not teach a piezoresistive amorphous carbon layer is applied onto at least one face of the at least one spring washer. Engeler et al., teaches a contact spring (25) in the hole of a contact part (26). Engeler et al. teaches that the piezoelectric disc (28) are bedded with the contact part. Engeler et al. teaches that the device can use an element working on the piezoresistive principle (Col. 5, lines 5-10). Engeler et al. does not teach a piezoresistive amorphous carbon layer is applied onto at least one face of the at least one spring washer.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamiko D. Bellamy whose telephone number is (571) 272-2190. The examiner can normally be reached on Monday - Friday 7:30 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tamiko Bellamy  
*T.B.*  
June 22, 2006

  
DANIEL S. LARKIN  
PRIMARY EXAMINER